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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,897	02/10/2006	Carlo Cognolato	09877.0356	5161
22852	7590	06/15/2011		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER HOFFMANN, JOHN M	
			ART UNIT	PAPER NUMBER
			1741	
			MAIL DATE	DELIVERY MODE
			06/15/2011	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/538,897

**Applicant(s)**

COGNOLATO ET AL.

**Examiner**

JOHN HOFFMANN

**Art Unit**

1741

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) 23-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-944)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/16/2010 has been entered.

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 14 recites a 'central orifice' – however such is not disclosed in the specification.

As pointed out in **MPEP 608.01(o)**:

Note that examiners should ensure that the terms and phrases used in claims presented late in prosecution of the application (including claims amended via an examiner's amendment) find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description, see 37 CFR 1.75(d)(1). If the examiner determines that the claims presented late in prosecution do not comply with 37 CFR 1.75(d)(1), applicant will be required to make appropriate amendment to the description to provide clear support or antecedent basis for the terms appearing in the claims provided no new matter is introduced.

As indicated above, examiner could not find any antecedent basis for the language and any support appears to be very unclear. Thus it is deemed that a prima facie showing

has been made of lack of clear support or antecedent basis. The burden is now on applicant to demonstrate clear support or antecedent basis for the claim language.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Examiner could find no support for the newly claimed limitation that the central orifice comprises an exit port. This is deemed to be a prima facie showing on failure to comply with the requirement. The burden is now on Applicant to show the requirement is complied with, or to amend the claims so that they comply.

An orifice and a port are generally considered the same thing: an opening. But there is no reasonable basis for an orifice defining a port.

There is also no support for the 'central orifice'. Examiner apologizes for not recognizing such in responding to the 7/12/2010 amendment.

There is also no support for the port which has the exit port which comprises a circular central region and plural radial regions.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14-22 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not understood what is meant by the orifice defining a port. It is understood that a potential competitor could create a burner with an exit port comprising the circular region and radial regions as claimed - without infringing claim 14 - as long there isn't a central orifice defined by that port. But it is not reasonably clear what how to tell whether or not a particular orifice is or is not defined by a port.

It is not understood what is required by the language "for ejecting an innershield gas", because it is unclear if it must be 'inner' relative to anything. Page 4, lines 12-14 of the specification indicate what applicant intended by the term 'innershield' - namely a gas shield that is between the flame and the stream of precursor material. However, the claim makes no provision for any structure or gas to which the innershield is 'inner' relative to. Thus it is ambiguous as to whether or not there must be structure for providing something external to the inner shield.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 14-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Wei 6363746.

Looking to figure 2 of Wei. The upper orifice of 62 is the central orifice. The exit port is the passage(way) that fluid 52 takes from 54 to exit through orifice 62. It is noted that the present specification does not identify what is meant by the term 'port'. It is assumed that 'port' and 'orifice' are not the same thing - otherwise applicant's would also be the exit port. The circular central region is the inner section of tube 44. The holes 50 are clearly radial regions that extend from the central region. In any of the planes that contain a level of holes, there would be a concave shaped cross. section.

Claims 15-17 Are met as per Wei's figure 3.

Claim 18: The claims do not require any structure that define the sectors. And the drawings show structure that only limit only part of sector. That is: a sector is two radii

with the included arc of the circle. Applicant's structure do not have corresponding two (full radii) and the included arc. In fact, there isn't even any part of a radius for the minimum radial sectors. Thus the prior art need not have structure that provides radii and the arc. Rather the claim reads on arbitrary sectors. Thus Wei, has the sectors as claimed. Examiner notes that the sectors minimum radial dimension is equal to the maximum radial dimension.

Claims 19-20 are met because there is a sector at any location of any angle. As discussed above, the claims do not require any structure to delineate the angular sectors or the angles. Thus one would understand that the angles and the angular positions and angular sectors can be said to exist.

Claim 21: the duct is essentially the passageway that fluid 24 follows. 44 is the central member.

Claim 22: The claim does not indicate what the enlarged portion is enlarged relative to. One could consider that tube 44 or the holes therein are enlarged relative to prior sizes. That is, by looking at the tube, one cannot determine whether it was previously larger or smaller, thus the 'enlarged' does not define over Wei's tube. It is clear that it fits with (i.e. within) all the walls of the central duct.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

It is argued that there is support for the exit port having the central region and the radial regions at page 5 lines 25-27. Examiner disagrees, because that passage refers to the central nozzle having those regions. The claim uses the term 'exit port' rather than the disclosed 'central nozzle'. It would seem a matter of common sense that an exit port and a central nozzle are not the same thing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN HOFFMANN whose telephone number is (571)272-1191. The examiner can normally be reached on Monday through Wednesday, roughly 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Daniels can be reached on 571-272-2450. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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